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A CONTRIBUTION TO THE PHYSIOLOGICAL STUDY OF VERATRUM VIRIDE AND VERATRIA, WITH EXPERIMENTS.

By Drs. AMORY and WEBBER, LaGrange Street Laboratory, 1869.

PREFACE.—The experiments which will be related in this paper were performed with the assistance of Messrs. Wood, Boutelle, Bridge, Spooner, Putnam, Pierce, Brigham and Cutler. Many points of interest still remain uninvestigated; but, as it may be several months before experiments with this drug can be resumed, and as we think the results thus far obtained are in one or two respects an advance on what has been hitherto recorded, at least in the English language, we venture to present them in this, comparatively, incomplete state. We wish to call attention to the fact, that the historical investigations on this subject were not commenced, until after our experiments had been performed.

Veratrum *viride* was not brought into notice until a little more than two years ago. Several practitioners had used and found this drug to be of great value; but its advantage was not generally known until Drs. Cutter, Rickard and Ingalls, in behalf of the Middlesex District Medical Society, called the attention of physicians to its use, and prepared an account of their experience with it, which was published in the *American Journal of Medical Sciences*.

Dr. Cutter's monograph attracted attention in Europe, and the drug was experimented upon there.

Veratria.—Previously the alkaloid *veratria* had been studied, but this was obtained from the seeds of veratrum sabadilla, and seems in some respects only to imperfectly represent the virtues of veratrum viride.

Magendie experimented with an impure veratria in 1820. In 1829 Bardsley published an article on the Therapeutical Value of Veratria. In 1844 Dr. Gebhard compared the action of veratria and strychnia. These are a few of the authors referred to by Van Praag.* A pricking or tingling, especially of the hands and feet, compared by some to the sensation produced by electricity, is mentioned by many; also, a sense of warmth followed by a feeling of coolness.

Van Praag noticed in several cases that the animals upon which he experimented had a peculiar spasm, which he likens to St. Vitus's dance, a stiffness of the limbs which ended in a dancing movement. He states that the cardiac pulsations were first increased and then diminished, irregular and then weak. The respiration was affected only when large doses were taken, when it was embarrassed or ceased entirely. He noticed, also, the weakness of the muscular power, but in his summary this seems not to have attracted his attention so much as the spasms. In some cases the pupils were dilated; there was evidence, also, of pain in the mouth or throat. Nausea and vomitings occurred constantly. No inflammation was seen in the *primæ viæ*. He performed experiments, also, on birds, frogs and fishes. His conclusions are:—

"The respiration and circulation diminish in intensity. The muscles lose their tension. The irritability of many nerves (especially the peripheric cutaneous nerves) is considerably lowered. After very small doses vomiting follows; often, also, diarrhœa, but this more frequently after large doses. The secretion of urine is not notably excited. Salivation is considerably increased. * * * The stage of stimulation [*erregungsstadium*] is shown by accelerated respiration, increased frequency of the pulse, cramp-like tension of the muscles, increased irritability of the nerves. Death from veratria poisoning seems to proceed from paralysis of the spinal cord."

He states, also, that veratria acted in a similar manner upon man. In no case did he find any signs of inflammation, and the

* Veratrin Toxikologisch-pharmakodynamische Studien von J. Leonides Van Praag, in Virchow's Archiv. 7, Band, 1854, s. 252.

results of *post-mortem* examination were entirely negative.

Veratrum viride.—Much has been written in regard to the use of veratrum viride in different diseases; and, so far as the record of cases gives an insight into the physiological action, this agrees with our experiments. The therapeutical and pharmaceutical character and uses of this drug are not, however, the subject of our investigation, and will be entirely disregarded.

Drs. Cutter and others investigated its action.* They remark that the benefit derived from its use is due to its sedative power over the circulation and the nervous system. The reduction of the pulse is mentioned in almost every case (40 to 60 beats per minute in the course of twelve to eighteen hours), as well as the general depression from prolonged sedation. Generally there was no nausea after its use, though this symptom is mentioned by other writers. Most of the facts mentioned in this paper are, however, therapeutical, and are not included in the plan of our investigation.

Another paper† by the same authors gives one or two cases worth referring to. In the first case detailed below, the effect of the drug upon the respiration is noticed. The case was reported by Dr. Minot, of Boston.

Case.—A young man, 18 years of age, with acute pericarditis, having an irregular pulse (96–116), took of Thayer's fl. ext. of of veratrum viride gtt. iv. The respirations numbered 30 per min. He became more comfortable during the day. The pulse in the evening was 96. This was October 12th.

Date.	*Pulse.*	*Resp.*	*Remarks.*
Oct. 13	87	36	Had taken seven doses; stopped on acount of vomiting.
" 14	112	36	Resumed the medicine.
" 15	112	30	Six doses taken; dose increased to gtt. v.
" 16	114	40	Took three doses.
" 17	112	24	(Pleurisy.) gtt. v. ev. 4 hrs.
" 18	96	22	Five doses; vomit. after last.
" 19	96	24	Four " nausea.
" 20	100	30	Three " "
" 21	96	28	Four " "
" 22	96		Five " "
23–25	100		

The medicine was omitted for a time, and then renewed, but neither pulse nor respiration were noticed particularly.

Another case‡ is reported by Dr. Forsaith, in which the pulse was reduced from 120 to 40, and the respiration was only 15, an over dose having been accidentally taken.

* American Journal of the Med. Sciences, Oct., 1858.
† Idem, Oct., 1861, p. 400. ‡ Idem, p. 403.

In another case,* reported by Dr. C. S. Bishop, of Philadelphia, a medical student who had been injured by fireworks; the pulse, at first 100, was kept at 60 for thirty-six hours, and "*from the time that the sedative influence of the veratrum viride became manifest he felt no pain.*"†

In the *Edinburgh Medical Journal*‡, Dr. J. Watson gives the results of experiments on himself and on several patients, from which we can derive some knowledge of the action of this drug. He took gtt. viij. of a tincture (made according to Dr. Cutter's direction) at 3 o'clock, P.M. Two hours after, his pulse was unaffected. At 5 o'clock he took another dose, and then had tea. At 6 o'clock his pulse was the same as at 3 o'clock. Towards 7 o'clock he was troubled with flatulence. Some minutes before 7 he began to feel nauseated and would have vomited, but restrained himself. The force and frequency of the pulse became diminished There was griping of the bowels, sickness and weakness, with considerable pain in epigastric region; he had a heavy, dull headache, with, occasionally, painful throbbing in the temples. His pulse, 70 at 3 o'clock, was reduced to 64. The pain in the bowels continued, and he felt himself growing weaker; but as he wished to experience the full effects, at 7 o'clock he took another dose of eight drops. From 7¼ he felt about as described above. Soon he became weaker and felt that he must vomit. The pain in his stomach and bowels became much more severe; a clammy cold sweat broke out on his brow, and at 7½ he vomited with much pain. While vomiting he required all his strength to support himself; his back became extremely weak; and, when a fit of retching came on, he felt as if he was going to be asphyxiated; he had one or two cold shivers; his feet and hands became cold and benumbed, though there was a large fire in the grate; the cold, numb feeling crept up the legs and arms, and, at last, his whole body felt as if enveloped in cold, damp cloths, and he became quite prostrate.

At a little after 8 o'clock his pulse was 40 and very weak. The flatulence continued, till a quarter past eight, when he again vomited slightly. The cold, clammy sweat continued, and the whole surface of the body was numb. At 8¾ his pulse was 56. After vomiting his face was quite pale, but there was no dilatation of the pupil. He felt prostrated during the evening, but the next day was quite well.

* Am. Jour. of the Med. Sciences, Oct., 1861, p. 406.
† Italics in the original. ‡ January, 1864.

This is one of the most valuable experiments recorded, and, so far as it goes, agrees with what has been found in animals.

Dr. Watson administered the tincture in three cases. In one the patient was suffering from phthisis with a pulse of 120. At quarter to 9 o'clock, gtt. viij. of the tincture were given, which dose was repeated in one half an hour, as no effect had been produced upon the pulse. In half an hour more the pulse was still the same, but in a few minutes she was found retching violently and vomiting. Her pain was intense and her prostration excessive. She continued vomiting at short intervals till within a few minutes of 11 o'clock. A cold, clammy sweat broke out over her whole body, but especially upon the face. At 10½ the vomiting was diminishing in severity (brandy had been given), but the prostration became more marked. Just before the vomiting commenced her pulse was at 120, but at 10½ it had sunk below 60, and was very weak. At a quarter before eleven it was 60, and at 11 o'clock it was 80 after taking wine and morphia. She was very much frightened on account of a *dead* feeling she experienced, especially in her limbs, and to a certain extent over her whole body. The following table shows the rapidity of her pulse:

9.45, P.M.,	120	12, midnight,	76
10.30 "	below 60	12.15, A.M.,	72
10.45 "	60	12.30 "	72
11 "	80	12.45 "	80
11.15 "	72	1 "	80
11.30 "	72	9 "	120
11.45 "	80		

In this case, the symptoms were essentially the same as in the previous experiment.

In the second case the tincture was given to a young man, aged 16 years, who had undergone amputation of the thigh on account of a tumor.

At 7 o'clock, 4 minims were given.
At 7.15, he had nausea.
At 7.30, he vomited.

His pulse was as follows:—

At 7, P.M., 152.
7.15 " 152.
7.30 " 136.
7.45 " 136.
8 to 9 " 132.
9 " 4 minims more were taken.
9.15 " 132; nausea increased.
9.30 " 124.
9.45 " 124; vomiting, with great weakness.
10 " 124; vomiting.
The next day, 11, A.M., 150.
The following day, 10, A.M., 132. Tincture again taken in the dose of 4 minims.
10.15, A.M., 132; feels sick.
10.30 " 124.
11.15 " 124.
11.30, A.M., 120.
11.45 " 126; 4 minims more. [iting.
12 " 124; great nausea and occasional vom-
12.30, P.M., 124.
1 " 128.
3 " 132.
The next morning, 160.

In the third case, the tincture was given to a man, aged 52, who had a fracture of the thigh-bone. Six weeks after the accident his pulse was high, but the general health of the patient was good.

At 7.15, P.M., pulse 100; gave 4 minims.
7.30 " 100.
8 " 100; gave 4 minims.
8.15 " 96; flatulence and nausea.
8.30 " 92.
8.45 " 88.
9 " 100; patient retching.
9.15 " 94; vomiting over, though great nausea.
9.30 " 88.
9.45 " 36; great nausea.
10 " 86.
11, A.M., 92.

On the second day the medicine was again tried.

At 10, A.M., pulse 100; gave 4 minims.
10.30 " " 100.
11 " " 96; flatulence.
11.15 " " 96; sickness and flatulence.
11.30 " " 92; " "
11.45 " " 94; another 4 minims.
12, noon, " 94; flatulence.
12.30, P.M., pulse 94; great nausea.
1 " " 90; other 4 min.; great nausea.
1.30 " " 96. "
2.15 " severe fit of vomiting, which lasted from 20 to 30 minutes.

He complained of a sinking at the heart, pain in the stomach and bowels, and, after the vomiting, of great depression, and of a *dead* feeling in the limbs. After vomiting, the pulse fell to 80, but at 3 o'clock, after taking stimulants, it was 92, and the next morning it was at 96.

In the *Medical Times and Gazette** is recorded by Dr. Edwards a case of accidental poisoning with veratrum viride.

A chemist took an over dose of the tinct. ver. vir. for the purpose of testing its effects. He took ℥j., equal to about 12 grs. of the powder. He was found sitting in the water-closet, vomiting into the pan. His features were sunken, skin cool and covered with a profuse clammy sweat; his pulse was quite imperceptible. He complained of intense pain in the epigastrium. The *vomitus*, at first, appeared to consist of food and contents of stomach, afterwards of a glairy mucus. He received immediately ℥jss. of pure brandy, which checked the vomiting. He was removed into a room, and on to a couch in front of the fire. The surface of the body was still very cold, especially of the extremities. The clammy sweat continued, but the pulse could be indistinctly felt, beating feebly and with irregularity,

* Jan. 3d, 1863.

about 44 a minute. Under the use of brandy warmth gradually returned to the surface, and the pulse became better in volume and power. He fell asleep, and awoke better. The next day he was well. There was no diarrhœa. He stated afterwards, that before and during the vomiting he had a sense of constriction in the throat, and excessive pain. His mind was calm, though consciousness was clouded for a time. Immense circles of green color were seen around a candle flame, which turned to red on closing the eyes. There was a tendency to cramps in his legs when they were touched.

M. Oulmont has published* in a memoir, read before the Académie de Médecine de Paris, the results of his experiments with this drug. He sums up the results of his experiments (which are not related) with veratrum viride, as follows :—

"1st. It quickly causes nausea, vomiting and diarrhœa, which two former may last fifteen to twenty hours.

"2d. The respiration is greatly modified, becoming irregular; sometimes, very rapid, sometimes so retarded, that there may be but one or two respiratory movements during a minute; sometimes in frogs it is completely suspended.

"3d. The circulation is very rapidly diminished in frequency; the pulse, at the end of a quarter or half of an hour, as much as 20, 40, or 60 pulsations a minute. In man not in a febrile state, veratria (in the dose of 1 to 3 centigrammes) causes the pulse to fall thirty to forty beats.

"4th. The temperature follows a descending scale a little less marked; at the end of half an hour to two hours only, it descends 2°, 3° or even 5° (C.), and may remain there twenty-four hours without death resulting.

"5th. The debilitating action of veratrum viride is manifested from the beginning. Feebleness and prostration continually increase, and when they have attained the highest point the animal dies.

"6th. There never results contraction, muscular rigidity or tetanic convulsions.

"7th. The poisonous dose of veratrum viride for frogs is 20 drops of the tincture, for rabbits 60 to 80, and for dogs 120 to 150."

He concludes from comparative experiments that veratrum album is much more unequal in its effects, and more severe in its action. He thinks that the action of veratrum viride does not depend on the alkaloid veratria†, as the latter causes muscular contractions and spasms.

* Bul. Gén. de Thérap., 1868, tome lxxiv. p. 145.

† According to our experiments, this distinction cannot be maintained.

M. Limon* found that the tincture of veratrum viride causes diminished frequency in the pulse and reduction of temperature. The pulse decreased from 112 to 54, and the temperature from 39 to 37 (C.). He noticed, too, that the sphygmograph showed an increased arterial tension, when the pulse is reduced in frequency. Its effects passed off rapidly, and there was no cumulative action. He, also, mentioned the vomiting.

Two cases, well reported and observed by MM. Tuber et H. Hirtz, *internes aux Hopitaux de Strasbourg*, were reported by M. Oulmont to the Society of Therapeutics.

The first was a case of pneumonia in a woman, 30 years of age, mother of three children, pregnant with a fourth. She entered the hospital on the evening of the 9th of March, on account of pneumonia of the left lung. The temperature was 39° (C.), pulse 112.

March 10th.—Temp. 38.8° (C.); pulse 108; respiration 80. Antimony and bleeding had been her treatment. In the evening the temperature was 39.2° (C.); the pulse 108; respiration 48.

March 11th.—Asphyxia seemed imminent. Temperature 39.7° (C.); pulse 112; respiration 76.

Veratrum viride was now ordered in granules containing 1 centigramme of extract. This was first given at 9½ o'clock.

Hour.	*Dose.*	*Temp.*	*P.*	*R.*	*Remarks.*
9.30	1st gran.	39.7°	116	76	
10.30	2d "	39.4	108	76	
12	3d "	38.7	98	68	Vomiting.
1.30		38.1	68	42	
3		37.8	64	44	Temp. of vag. 38.6°.
4.30		36.8	64	38	

The vomiting which arose after the third granule caused considerable distress, which was of short duration. During the evening the symptoms recurred in severity.

March 12th, A.M.—Temperature was 39.2°; pulse 104; respiration 80. Veratrum viride was again given.

Hour.	*Dose.*	*Temp.*	*Pulse.*	*Resp.*	*Remarks.*
10	1st gran.	38.8°	108	74	
11	2d "	38.3	100	50	
12	3d "	37.4	82	50	Vomiting.
1.30		38.3	60	30	
2.30		38.6	60	40	
3.30		37.7	64	40	
4.30		37.5	72	40	
5.30		37	68	28	
6.30		37.5	80	40	
7.30		37.5	80	36	
8.30		37.2	80	36	
9.30		37.9	80	36	
10.30		38.1	80	36	
11.30		36.6	96	40	

* De l'action du Ver. Vir., Gaz. Méd. de Strasbourg, in Bull. Gén. de Thér., Jan. 30th, 1869.

March 13th.—Temperature 38.7°; pulse 96; resp. 32. She gradually recovered.

The second case is one of generalized bronchitis in a man 37 years old.

We do not think it worth while to transcribe this case, which agrees in every essential with the one detailed above.

Summary.

The conclusions in regard to the physiological action of veratrum viride, and the alkaloid, veratria, which can be drawn from these experiments and cases recorded by others, confirm those that we have been induced to draw from our own experiments. We need only mention, here, the influence which is exerted upon the nervous system. In some respects resembling the action of woorara, it differs from that poison in less energetic action, in attacking the sensory fibres as well as the motor, and in diminishing the frequency of the cardiac pulsations. We have not performed any experiments to show whether the periphery or centre of the nervous system is affected, or whether the whole nervous tract is influenced.

The influence over the cardiac pulsation is, however, such that we are disposed to suspect that the nerves supplying that viscus are influenced at their central origin. The reduction in temperature indicates that the metamorphosis of tissue by which the temperature is sustained is interfered with; but this is most marked in cases of abnormal excess of temperature. The reduction of temperature would, also, indicate an influence over the vaso-motor system; the paleness of face, the dilated pupils, which have been sometimes noticed, and the increase of the arterial tension, observed by Limon, point to the same conclusion. If this be so, the weakness and paralysis may be due to an excessive contraction of the arterioles. Our experiments do not allow us to decide whether it is the spinal cord which is affected by this contraction, or whether it is the nervous trunks, or the terminal fibres of the nerves, or the nervous plates, which form the connection between the nerve and the muscle; but inasmuch as the respiratory and cardiac movements, the arterial contractility, the motor and sensory powers, and the secretory functions are all more or less affected, it seems more reasonable to refer the disturbance to the spinal axis, as that part of the nervous system through which the influence is exerted, and from which all the above-mentioned results are produced.

The nausea and vomiting, the sensation of tingling, the prickling in the fingers and toes, and other abnormal sensations in the throat and elsewhere, which seemed to be present even when the drug was administered hypodermically, might be caused by the direct contact of the drug upon these parts as it circulates through them in the blood. A local application produces a numbness and deadens the pain of neuralgia. The deadness and diminished sensibility may, likewise, be due to the local contact of the drug; or, both these effects, viz., the loss of sensitiveness and the abnormal sensation, may be due to its influence over the central nervous system.

In one case only, that of accidental poisoning, does there seem to be a cloud over the intelligence.

These are the conclusions which follow from what has been recorded by others, and it will be well to bear them in mind in considering our experiments, which will now be given.

It is proposed to show, by the following experiments, the symptoms produced in various animals by veratria, and at first from a poisonous dose.

Exp. I.—Green-colored frog. Before the administration of the poison, the thorax is opened, and the number and force of the cardiac pulsations noticed:—Respiration 10; pulsations 32. Veratria placed upon the web of the frog's foot.

Hour.	*Respiration.*	*Pulsation.*	*Remarks.*
0.21	feeble.		
0.31	very feeble.		
0.36			veratria applied to heart itself.
0.41	nearly ceased.	very feeble.	heart pale.
		28	tetanic spasms; right lung forced out of thoracic opening and ruptured.
		the same.	
0.58	ceased.	very feeble.	tetanic spasms every few minutes.
2.21		still goes on.	
2.31			obliged to leave; muscular fibres contract to stimulation.

Post Mortem, twenty-one hours after. Continued rigor mortis; muscles, heart and liver all very pale. No muscular contractility to stimulation or by electricity. Lung tissue contains air. No transverse striæ visible by the microscope in cardiac muscular fibres, which seem to be replaced with granular spots.

In this experiment it may be noticed that veratria is not very readily absorbed by the skin of a frog; and, also, that after its topi-

cal application to the cardiac muscles, it does not cause paralysis of the heart's action, though it does produce cessation of the respiratory function. It produces various muscular spasms, to which the frog, of all animals, is the most liable, and which may, after all, be voluntary movements.

Exp. II.—Russet-colored frog. As it is stated by some observers, that phenomena produced in the green-frog and in the russet-frog are dissimilar, the effects are reproduced upon the latter that a comparison may be drawn. The *tincture* of veratrum viride was used in this case.

Tinctura veratri viridis gtt. q. s. Subcutaneous injection to leg.

Hour.		*Pulse.*	*Resp.*	*Remarks*
0.07	Thorax opened.	22		
0.07		weaker.		
0.13		22		
0.18			very feeble	spasms.
0.35		do.		
0.40		18		
0.53		10,irreg.		
1.00		12		
1.12		10		
1.22		12	ceased.	

Post-mortem examination showed diminished response to electrical stimulation in the leg to which the injection was administered; striated muscular fibres of this leg somewhat disintegrated, though the striæ can be distinguished. This is specially true of the cardiac muscles. Rigor mortis very marked.

This last experiment agrees in general with the previous one, but the symptoms and other effects are more intense, probably, because the dose of *veratria* was larger.

Exp. III.—Frog (green). Tinctura veratri viridis gtt. xii. placed under skin of a frog's leg. When it touched the flesh the frog jumped and kicked.

1′. Respiration spasmodic.
5′. " irregular and jerking; violent struggling.
11′. Respiration slower and jerking; violent struggling.
16′. Respiration feeble.
17′. Convulsive movements; bulging of sides, reminding us of the efforts at vomiting by a cat under similar circumstances.
24′30″. Same effects; resp. ceased for a short time, and was then resumed.
1.8′. Muscular quiverings in posterior extremities.
1.45′. All phenomena of life had ceased, including those of reflex action.

Post mortem.—The muscles near to the place where the veratria had been applied were, in some places, covered with granular degenerations (as it appeared under the microscope), and, in others, extremely fine transverse striæ were arranged very near each other; the corresponding muscles of the opposite leg had nothing of this peculiarity. The cardiac muscles were easily separated into fibrillæ, some showing a coarse striation, others the same granular appearance above referred to. The hearts of each of the two frogs (Exp. II. and III.) were pale and muscles somewhat contracted, each animal having an abundance of fluid blood in its body.

These peculiarities were afterwards explained by a more careful examination, made with the use of alcohol and ether, which cleared up the field of observation, leaving the striæ more distinctly marked, though the fibrillæ were a good deal disintegrated and broken up. We were led to suppose that these dubious effects were due to mechanical deposition of the drug, as both the solution of veratria and the tincture of veratrum viride under the microscope had these same spots, and muscles soaked in either of the above were covered with these same globules.

This last experiment shows, in a general way, how the respiratory movements in a frog are modified, and that death can be induced by a dose of 12 drops; also that the *post-mortem* changes reveal little to show by what cause the vital functions are interrupted. It will be interesting to compare these first three experiments, taken from a number made upon frogs, with

Exp. IV.—Upon a cat.

A small amount of veratria (by estimation 3 to 5 centigrammes) on the point of a scalpel was inserted beneath the skin of the back, just over the upper lumbar vertebra. The cat immediately licked the wound.

5′. Champing of jaws and salivation; eyes closed; sneezing and retching; no loss of power over limbs; continued twitching of tail, occasionally crying; head held up with her nose in the air.
35′. Another dose (of equal amount) is administered in the same manner. Seems to cause much pain, from the crying induced. Apparent loss of muscular power in posterior extremities; great uneasiness and distress.
40′. Has a dejection; after which, seems disinclined to move.
1.9′. Eyes shut; when opened, pupils appear round and bright.
1.45′. Another defecation.
2.0′. Retching with cries, followed immediately by others, which were continued with much violence.

2.5′. Another more violent attack of retching, the cat dragging her face along the floor for six inches.

2.15′. Vomits a small portion of liquid food. Some loss of muscular power in posterior extremities.

2.20′. More veratria administered, followed by continuous moaning; violent spasms, pawing at mouth, loss of muscular control; respiration very rapid; violent efforts at vomiting, drawing her up and off her feet.

2.35′. Convulsions and vomiting; respiration diaphragmatic. No loss of sensation.

2.55′. Ejection of urine followed by tetanic spasms and muscular twitchings.

2.55′. No respiration, no cardiac pulsation —death.

Post-mortem examination. Heart normal —lungs congested, ecchymosed and emphysematous, the lower lobes covered with white spots. Stomach rather pale; liver and intestines show no peculiarities; bladder empty; muscles of heart showed broken-up fibrillæ with the striæ somewhat irregular. In a muscle from the thigh the striæ were distinct.

[To be continued.]

DISLOCATION OF THE ELBOW; A NEW METHOD OF REDUCTION.

By Thomas Waterman, M.D., Boston.

Finding no record in the surgical text-books of the method described below, I have thought the following case and comments worthy of publication.

On the 9th of May last, I was called to visit Mrs. L., æt. 30. She stated that, when near the bottom of a flight of stairs, she had tripped and fallen down the last three steps, striking with the whole weight of the body on her extended hand. As the accident had happened but half an hour previously, there was no swelling to mask the lesion. The left elbow was flexed at a right angle, and all motions were attended with great pain. After etherization, the ulna was found to be dislocated directly backwards at the elbow, as shown by the unusual prominence of the olecranon, depressions on either side of the triceps tendon, and resistance to complete extension of the forearm, which was twisted and pronated. The head of the radius rotated in its normal position, and no other lesion—neither dislocation nor fracture—could be detected.

Assuming that the patient's statement was correct, it seems strange, in view of the intimate connection of the carpal bones with the lower extremity of the radius, that Colles's fracture of that bone did not occur; or, failing this, that the head of the radius was not forced out of place, either alone or in addition to the dislocation of the ulna.

Faithful trials of Sir Astley Cooper's method of bending the arm over the knee, and Mr. Skey's method of extending the forearm directly downwards in a line with the upper arm, failed to produce any effect.

I then succeeded in reducing the dislocation by bending the forearm backwards beyond a straight line, when, without any extension downwards, the ulna returned to its normal position with a slight shock. An internal angular splint was applied, and evaporating lotions recommended. In eight days the splint was removed, the patient allowed to carry the arm in a sling and to execute slight motions in the joint daily.

The *modus operandi* of this method is as follows, viz.:—when the ulna is dislocated backwards at the elbow without fracture of the coronoid process, the latter occupies the olecranon depression of the lower end of the humerus, and often requires considerable force to remove it from its abnormal position. By the method above described, the forearm is used as a lever, with the power (hand of the surgeon) at one end, the fulcrum (olecranon) at the other end, and the weight to be moved (coronoid process) between. As the forearm is extended backwards beyond a straight line, the olecranon impinges against the lower end of the humerus and becomes a fixed point or fulcrum; by continuing the forced extension, the coronoid process is lifted out of the olecranon depression of the humerus, and, when this is accomplished, the tonic contraction of the brachialis anticus muscle restores the ulna to its natural place.

It will be seen that this method of reduction is exactly the reverse of the process by which the bone becomes dislocated, although it returns by the same path by which it escaped; these two facts, it seems to me, should be borne in mind in the reduction of all dislocations, and additional proof of this statement may be derived from a study of Prof. H. J. Bigelow's system of reducing dislocations of the hip by manipulation, and Dr. Crosby's method of reducing dislocations of the thumb.

The method is capable of the most decisive demonstration with macerated speci-

mens of the ulna and humerus, and might be employed in dislocations of both radius and ulna backwards. It would be especially efficient in the reduction of old dislocations after the adhesions have been thoroughly broken up.

Since writing the above, I have noticed in a late number of this JOURNAL the account of a case, copied from the London *Medical Times and Gazette* for July 17th, 1869, p. 79, in which essentially the same method, *i. e.* excessive extension, was successfully applied to the reduction of a vertical dislocation of the patella.

DISLOCATION OF THE TRAPEZOID.

By GEO. W. GAY, M.D., Surgeon to Out-patients, City Hospital.

M. R. A. C., æt. 25, while fooling with some of his companions, July 16th, 1869, struck one of them upon the shoulder blade. The blow was struck with the right hand, the arm being nearly straight, and the force coming on the knuckles of thumb and first finger. He felt something suddenly give way in the wrist, and on examination found a small bunch, which was not there previously. Not being able to work, he applied to Dr. Martin, of Roxbury, who recognizing the injury and knowing it to be a surgical curiosity, sent him to the City Hospital.

Sixteen hours after the accident, he was etherized and a very careful examination made alongside the arm of an articulated skeleton. There was almost no swelling, and it was the opinion of the gentlemen who saw the case, that the diagnosis was as correct as it could possibly be, without a dissection.

At the base of the metacarpal bone of the right index finger was a sharp, hard, slightly movable bunch, raised about a quarter of an inch and tender on pressure. It could not be depressed or made to disappear with the hand in any position and the patient fully etherized. There was no crepitus, and the metacarpal bones of both hands were of the same length; the other bones of the wrist were in their place. Both wrists were perfectly sound before the accident, and had never been injured.

By means of an anterior tin splint and adhesive straps the hand was kept extended on the forearm at an angle of forty-five degrees, for a fortnight, with no improvement to the deformity. Motion of the wrist good, as it always had been since the accident, but the motion caused less pain than at first. Ordered to go to work and report any further trouble.

Sept. 9th.—Right wrist nearly as good as left. Slight pain on extending thumb and index finger; deformity the same as at first, except the point is not quite as sharp, and there is a little induration around the bone. This dislocation is so rare that the common text-books on surgery say nothing about it. I do not know whether there are any cases on record.

Boston, Sept. 10, 1869.

Bibliographical Notices.

Archives of Ophthalmology and Otology, edited and published simultaneously in English and German. By Prof. H. Knapp, M.D., in New York, and Prof. S. Moos, M.D., in Heidelberg. Vol. I., No. 1. New York: Wm. Wood & Co.; Carlsruhe: Chr. Fr. Mullersche Hafbuchhandlung. 1869.

"Our eyes see the dispersion of the mists which for centuries have darkened the ken of the best investigators; and, thanks to the timely knowledge which is now possible, the domain of therapeutics has been extended over a previously undiscovered field, rich fruits from which have within so few years crowned our labors. But how much toil and time are here required for observation, comparison and research. How many sources of error are to be avoided in this, as in every other new method of investigation. What a multitude of data from pathological anatomy and microscopy must be intermingled with clinical observation to teach the true signification of the observed phenomena, and a right appreciation of their development. Persevering and united effort are here essential."

Thus, in 1854, wrote von Graefe in his preface to the first volume of the Archives of Ophthalmology, a work then commenced as an experiment, but which, continued uninterruptedly down to the present day, has embraced in its issues the great discoveries, and numbered among its contributors the famous names which have given ophthalmology its present high position in the field of medical science, and entitled the last fifteen years to rank as its golden age.

"We should be bold indeed," says Dr. Knapp, in his modest preface to the present work, "if we were to expect from the next two decades so many brilliant discoveries as the last two have given to the scientific world. Nevertheless, research in ophthalmic, as well as in aural surgery, is still

necessary, productive and full of promise. A great many questions yet remain unanswered; many morbid and physiological conditions have to be elucidated; and most, we might say all, the results of modern science in these two specialties are yet of so recent a date, that it would be difficult to denote any one point which might not profitably be subjected to renewed searching scrutiny."

No journal of either Ophthalmology or Otology exists at present in this country. The *Archives*, however, need no such apology for seeing the light. The names at their head, the materials with which this first issue is filled, and the tone that pervades its contents leave no doubt as to the position they are destined to take in medical literature, and the justice of their claim to a prompt and generous support.

En passant we might express a wish that a more original title had been chosen, fearing as we do that some confusion will arise between the foreign issue of this work, and the publications now directed by von Graefe and von Tröltsch. Nor can we wholly follow Dr. Knapp in his views of the necessary connection of diseases of the eye and ear, or share his opinion that "henceforth a conscientious student will hardly be satisfied with limiting his knowledge to one single organ, but will, on the contrary, by reason of the many analogies between them, be led from ophthalmology to otology, or *vice versa*," &c. Indeed, in the next paragraph he takes a more practical, if less exalted view of the matter. " * * * It will be proper to remember that—the number of oculists having so much increased during the last decade, it will not be wise for the younger generation to rely with too much confidence on ophthalmic surgery exclusively."

A detailed analysis of the materials contained in this number would require more space than the columns of the Journal can well afford. The table of contents contains the titles of twenty-seven articles, furnished by an illustrious list of native and foreign contributors, their names alone being a sufficient guarantee of the value of their productions. Seventeen are to be classed in the ophthalmic and ten in the aural department. Among the American writers are Pope of New Orleans, Williams of Cincinnati, Williams of Boston, Noyes and Roosa of New York; while from across the Atlantic come articles from the pens of Hinton, Becker, Liebreich and Wecker. The editors, Dr. Knapp and Professor Moos, furnish much valuable material.

The chromo-lithographic plates and exquisite engravings, a number of which accompany the present volume, were executed at Carlsruhe, and naturally throw into the shade all such appendages to medical works brought out in this country.

Without desiring to be captious we cannot refrain from calling attention to one or two drawbacks to the completeness of the present volume. Typographical errors are alarmingly frequent, the services of a proof-reader having been apparently even more sparingly employed than is usually the case with Graefe's *Archiv*, which we had always, up to the present time, supposed to contain more misprints than any other scientific book of its size. Some of the translations from the German are also stiff, awkward, and involved to a degree, sacrificing both perspicuity and conciseness to a blind adherence to the original idiom or order. It is with dismay that the reader finds himself confronted with such a clause as the following:—" Notwithstanding such positive and so many times publicly demonstrated results." But even the author of the Portuguese Guide would be out of his depth in what ensues. " It is highly striking that not even with higher current intensities, as it is possible also in the motor nerves to obtain the closing sensation with An, and the opening sensation with Ka."

We wish that the *mariage de convenance* between ophthalmology and otology were as likely to be dissolved, as such inadvertences are sure to be repaired. But, taken as it is, the work Dr. Knapp has undertaken marks an era in the history of American medicine, and gives new dignity to the course and efforts of the special practitioner. No higher praise can be bestowed upon it than the statement that it bids fair to be worthy its founder's reputation.

H. D.

[Mr. Editor,—I send you a few extracts from the notice of a new German work on Transitory Disorders of Consciousness, taken from the *Annales Medico-Psychologique* for July, 1869. From the space in your columns lately devoted to the discussion of transitory mania, I have thought your readers might be interested in knowing where to find the latest ideas on this subject. T. W. F.]

Die Transitorischen Störungen des Selbstbewnostseins: Contributions to the History of Transitory Mania, from a Clinical and Medico-Legal Point of View, for Physi-

cians, Judges and Lawyers. By Dr. de Krafft-Ebing, Euke. Erlangen. 1868.

Under this title the author presents a succinct account of all the psychological states in which, from one cause and another, a man losing momentarily the knowledge of his acts and of his own existence, enjoys no longer a free agency, and is not responsible for reprehensible acts which he may then commit. These acts, almost always of extreme violence, are the more difficult to estimate, from the fact that the state of alienation in which they are committed has usually completely passed when the physician is called to form his opinion. This, then, is one of those chapters in psychology to which physicians and jurists cannot give too much attention, and the work of Dr. Krafft-Ebing will be in all cases a valuable guide.

Besides his personal experience, the author has conscientiously studied the whole literature which relates to this interesting subject, and the works which he cites at the head of each chapter will greatly facilitate research.

Dr. Krafft distinguishes seven different groups of conditions, under any of which transitory mania may occur :—

(1.) The state of dreaming.

(2.) Different kinds of intoxication.

(3.) The delirium of febrile maladies.

(4.) The transformation of neuroses (such as epilepsy, hysteria, neuralgia).

(5.) The transitory psychoses. First. *Transitory mania*, properly so called, which is not always easy to distinguish from other analogous states, and above all from epileptic mania, or neuralgic dysthymia. This form consists in a primary aberration of the intellectual faculties, which may last from twenty minutes to six hours; it appears suddenly, without warning, differing in this from the preceding states, in individuals (generally men) perfectly well behaved before and after the access. The loss of consciousness, and afterwards of recollection, are complete. The access has the character of fury, or acute delirium, with hallucinations and illusions, and terminates in a profound sleep. The access is generally unique, and recurrences very rare. This form of the affection is probably due to congestion of the nervous centres. Second. *Raptus melancholicus.* This condition has, without doubt, always a foundation in some neurosis—some psychosomatic affection, which is the source of that distress which irresistibly drives the individual to commit acts of violence in order to relieve it. Usually, the act committed, he is calm and satisfied, until consciousness brings the recollection of it.

(6.) Pathological passion and delirium of the senses. Every man has passions which he can conquer and control if in his normal psychological state; but there exists an unfortunate class whose physical and mental organization is defective, either temporarily or permanently, and with whom violent passions or emotions produce a reaction of which they are not masters, and which too often brings them to the bar of justice. They are not responsible in the same degree as those of firmer moral and physical fibre. The paroxysm of passion may go on to complete delirium and produce a true access of transitory mania, during which the senses may be led into error, and the perception of exterior objects distorted. The limit of responsibility is here difficult to trace, and it is necessary carefully to individualize.

(7.) Transitory intellectual troubles during and immediately after childbirth.

All these conditions of transitory disorder may prove very difficult to estimate when the question of responsibility is raised, since the direct examination of the accused affords only negative results. His physical, moral and intellectual antecedents, both personal and hereditary, and his condition preceding the act, in reference to fatigue, emotions, nervous accidents, &c., may furnish valuable indications. Next, one should study the character of the act itself, which is always violent, sudden, without plausible motive or conscious aim, absurd, illogical, the patient breaking, killing, destroying, indiscriminately all which comes to hand, and often to the detriment of his own best interests or of his dearest affections. There is no concealment and no calculation. It is a blind, brutal, irresistible force which acts in the individual. He acts openly and does not secrete himself. He acts often with noise and violence. Nothing can withhold him in his blind fury.

Somnambulism furnishes an exception to this rule, not presenting all these characters, the acts often appearing the result of forethought and calculation. The manner of the accused will, however, generally be a guide to his mental state. He has usually no knowledge of what has passed, and does not understand why he should be accused; he is calm and tranquil, having no fear of consequences for the same reason.

In *raptus melancholicus*, it may happen that the patient has a knowledge and recollection of what has passed, for when the

access is over he often goes to denounce himself to justice. This form of transitory mania is also distinguished from others by the fact that the individual seems to calculate his acts, or at least to be more or less conscious of them at the time of commission. Their irresistible character excludes responsibility nevertheless.

Medical and Surgical Journal.

Boston: Thursday, October 14, 1869.

ABUSE OF INSANE ASYLUMS. IN WHICH SENSE SHOULD THE PHRASE BE TAKEN?

Our attention has been called to the following article in the *Boston Daily Advertiser*, of Sept. 18th. A similar piece appeared in the *Boston Post* of the same date:—

Mr. H. Frothingham, a New York merchant, was released from the Bloomingdale Insane Asylum a few days ago on a writ of *habeas corpus*. He had been an inmate of the institution for more than three months, during the whole of which time he alleges that he was of perfectly sound mind. "I can only assert," he says, in a letter published in the *New York Times* of yesterday, "that I am sane now, was sane at the time I was taken there, and was of sound mind and memory during the whole time I remained there." The story of his incarceration is briefly this:—On the morning of the 8th of June last he returned to his house after a night's absence, and found there two strange men. He conversed with them a short time, and at their request left the house in their company. He was at once taken by them to a station house, and shortly afterwards he was removed to the police court room at the City Hall in Brooklyn. Here he saw his brother and one gentleman with whom he had a slight acquaintance—all the rest present were strangers. No testimony was taken by the judge, and an examination was refused; but when Mr. Frothingham said he would like to consult Mr. Evarts, he was removed from the court room and placed in a carriage, in which were seated his brother and the two strangers of the morning, who stated that they were going to Mr. Evarts's residence. Mr. Frothingham was driven, however, directly to the Bloomingdale Asylum, where he was forced to remain for the period abovenamed. The only reason he can assign for this treatment is found in a conversation which he had on the day previous to his imprisonment with a son of a cousin, in the course of which he informed this relative of "a matter, of which he was unaware, in regard to certain relatives who resided in Massachusetts." What this matter was he declines to say, remarking that its nature will be disclosed by the legal proceedings which he is about to institute. The extraordinary features of this case have attracted a good deal of attention. *It clearly illustrates the facility with which designing persons may secure the confinement in insane asylums of those they desire to victimize,** and it is to be hoped that it will reveal the necessity for such legislation as will prevent the possibility of such occurrences in the community.

A nice sensation story, with a sounding "snapper" at the end of it! It would seem almost a pity to say anything to mar the effect. But duty is inexorable. The two secular Journals aforesaid, leading papers in their respective parties, the one proverbial for its "respectability," the other, the embodiment—outside of its political harness—of courtesy and good-fellowship, might have been, we suspect, more discriminating, if they had been less anxious, perhaps, to point a moral and adorn a tale in a pungent paragraph. They might possibly have considered that the presumption was in favor of the wisdom of the professional parties who certified the unfortunate gentleman to the Bloomingdale Asylum, and of those who retained him there, unless that presumption was overthrown by competent evidence. It was not set aside, we take it, by the issue of the *habeas corpus* requiring them to show cause, and so forth, and would not be overruled except by further legal proceedings, which at our last advices had not been instituted. It certainly was not weakened by the fact that the Insane Asylums are generally well filled, and that their superintendents are discussing the expediency of billetting some of the harmless inmates of these institutions in private houses. Our eminent cotemporaries might also, if they had duly reflected on what they were doing, have refrained from passing summary judgment, before ascertaining the correctness of the facts

* The italics are ours.

alleged, and the antecedents of the person principally concerned in the transaction animadverted upon.

Not long previously to his confinement in the Bloomingdale Asylum, Mr. Frothingham was in Boston, and exhibited such symptoms that he was sent to the McLean Asylum in Somerville, at the instance of his brother, and of a mutual friend—a very respectable merchant of this city. That he was insane at that time, we are able to testify personally, as we were one of the two physicians who, in accordance with the law, certified him over to the Hospital. Before our interview with him on that occasion, we had no knowledge of any of the parties to the occurrence, except Dr. W. O. Johnson, who came for us, in default of finding Dr. Jacob Bigelow, for whom he first went. Thus we were free from all bias in the matter. And, speaking as a physician, we must say that we should think it impossible that any tyro in medicine could have failed to draw from that interview the professional conclusion at which we arrived, and on which we acted, viz. :—that the patient was then of unsound mind and requiring medical treatment. Not a doubt of his insanity was entertained by Dr. Tyler, who received him into the McLean Asylum, and who retained him there until he was withdrawn at the desire of his mother and sister; the consent of the brother, upon whose request he was admitted, having been obtained. Let it be understood that the patient was not discharged, as cured, but merely surrendered to the authority of the relatives who demanded him; and no complaint, that we are aware of, has been made of the action of any one concerned in this chapter of his history.

We are informed that the patient's subsequent career was eccentric, and that his mother had him placed in the Bloomingdale Asylum; since his removal from which he and the newspapers seem to have had matters pretty much their own way. Instead of his being a wealthy merchant, as one of the papers has it, his nearest relative, we are told, had mortgaged her house to set him up in business. Thus his heirs would seem to have had no pecuniary motive for confining him.

Of course we cannot at this distance of time and space affirm the present insanity of the gentleman in question; nor are we authorized on the ground of our professional opinion that he was deranged when we saw him in Boston, to assume that his mind was disordered when afterwards he was sent to Bloomingdale. But, doubtless, if our editorial friends had known the circumstances we have recounted, they would not have entertained their readers with the story in question, as furnishing a test case which "clearly illustrates the facility with which designing persons may secure the confinement in insane asylums of those they desire to victimize." It may be claimed that a reporter has no time to investigate such facts in every case he puts into print. Very well! Then it is equally true that the same reporter has not the time for a fair and full statement of such matters at all, and should therefore remember that there are junctures when "silence is golden." In such cases he should confine himself to the bare item of the confinement and removal of the so-called insane, with perhaps a mere allusion to the allegation that the detention was improper, as being an assertion "important if true."

We have occupied thus much space in dealing with this matter, because it seems to be the fashion of the day to find fault with insane asylums, and to spread broadcast everything which may make against them, notwithstanding that they were never better managed than they are now. The tendency of all this is to prejudice people against those institutions and their management; and thus to a certain extent to deprive the public of a means of cure—of *the* means of cure—for one of the worst maladies afflicting the human race. Nay, more! Just as sure as the planting of the seed leads to the harvest, just so sure will the course we deprecate *multiply tragedies like that which occurred at Longwood last year*; or like that recently cited by the New York *Medical Record*.

It occurs to us that this fashion of carping at the public benefactors in question, may have sprung from the accumulated complaints of lunatics, whose habit of decrying their keepers is a part of their sad

disorder. It is just possible, however, that it may also be traced to a less worthy course. It may be the reverberation of the "sensation" produced by a certain English work of fiction, the plot of which turns upon the interest sought and produced among sentimental readers, by the adventures and sufferings of the hero in a private mad-house. This fabrication of the author's fertile brain makes the matron procure the release of an inmate—an imbecile—in order that he may "go to house-keeping" with her according to law. A highly wrought story may be absurd in its contrivance, but pernicious in its effects.

At all events, if the present tendency goes on unchecked, and the practice becomes widely adopted of private individuals constituting themselves the keepers of the insane, the butchery of unoffending wives, husbands, parents, children or neighbors, by lunatics, will be more common than ever. Singularly enough, this popular error is coupled with a converse form of pseudo-philanthropy—that of shielding the wilful murderer from punishment under the pretext of insanity.

NOTES FROM FRENCH JOURNALS.

Flexion in Popliteal Aneurism.—In a July number of the *Union Médicale* is a valuable analysis by M. Liégois, relative to *The Treatment of Popliteal Aneurism by Flexion of the Leg on the Thigh.*—M. Liégois claims that the French surgeon Lenoir first applied flexion in the treatment of popliteal aneurism. He employed semi-flexion only, and failed after a month's trial. Mannoir of Geneva obtained the first success. In 1863 Hart, an English surgeon, reported a series of 12 successes. M. Liégois's analysis is based upon a thesis of M. Stopin containing 49 cases, all borrowed from English surgery except 8.

These 49 cases are divided into two principal categories—the successful ones and the unsuccessful. The first series—the successful—are subdivided into three secondary categories:—1st. *Cases in which flexion alone was employed.* There were seven of these, in which the age of the subjects ranged from 30 to 40 years, with the exception of one of 60 years. The size of the tumor was inconsiderable—generally from that of a walnut to that of an orange—though one was as large as the fist. In all but two, pulsation ceased during flexion; and in those two it was very feeble. All these seven got well without relapse, after flexion lasting from 3 to 18 days.

The second subdivision comprises *cases in which flexion was resorted to after the failure of certain other methods of treatment.* In those recoveries, four in number, the aneurisms varied in volume from that of an orange to that of a hen's egg.

Thirdly, we have *cases in which flexion was employed in concurrence with other measures.* In these, we are told, it is difficult to assign the share the flexion had in the successful results. In one the aneurism was of the size of the fist; in the others it was as large as a turkey or goose egg.

We have thus 26 cures in 49 cases.

The *failures* were 23 in number. In 3 of them the flexion was borne, but was ineffectual. In the remainder pain interrupted the continuance of the flexion, which latter, however, was generally forced and not gradual or intermittent. By way of sequence there was rupture of the sac seven times, and once inflammation of it. The most probable contra-indications of this method are, according to M. Stopin, the author of the thesis analyzed, severe pain produced by the flexion; a large sized aneurism; granulo-calcareous degeneration of the arterial system.

M. Liégois goes on to compare the value of flexion with digital compression, to the advantage of the latter. After he had read his paper before the *Société Impériale de Chirurgie*, a discussion ensued with regard to this comparison, in which M. Le Fort, M. Giraldés and M. Trélat differed from some of the views of M. Liégois.

Animal Vaccination.—The *Gazette Hebdomadaire* of September 10th says it would seem idle to revert to the question of animal vaccination on the occasion of each session of the Academy. It awaits the replies to what has been advanced which will not be slow to appear, before estimating in their totality the results of the discussion, which has now been long pending. Hitherto nothing appears to the *Gazette* to have

essentially impaired the principal assertions of M. Depaul, as they now stand. It says, first, the increasing efficacy of revaccination; otherwise put, the increasing inefficacy [the diminishing efficacy] of vaccination has been denied by no one, but merely explained in different ways, and that not as the central point of debate: Secondly, the existence of vaccinal syphilis was contested, but [now] everybody admits it, though the degree of its frequency is a subject of discussion: Thirdly, animal vaccination was regarded at first as dangerous, then as a fallacy, and agreed upon as being at least as valuable as human vaccination. It remains to ascertain, we are told in conclusion, what consequences to draw from these facts in relation to the general practice of vaccination. That point awaits examination.

M. Latour on Animal Vaccination and Vaccinal Syphilis.—M. Latour, in the *Union Médicale*, after adverting to the isolated position in which this long debate has left M. Depaul, lays down the following propositions as the legitimate results that flow from it:—1. The degeneration of the Jennerian virus is far from being proved. 2. There does not exist a single authentic example of vaccinal syphilis, properly so called. 3. The excessively rare cases of syphilis inoculated by vaccination are explicable by conditions which completely exonerate the vaccine virus from all injurious mixture. 4. A large number of pretended examples of syphilis following vaccination justify the most serious doubts as to the accuracy of the diagnosis. 5. Animal vaccination, simply as another source of lymph, is deserving of encouragement, although it possesses no real or sensible advantage over vaccination from arm to arm.—*London Med. Times and Gazette.*

M. Ricord on Vaccinal Syphilis.— * * * * M. Ricord, however, cannot agree with M. Guérin that the diagnosis of the disease is very vague and uncertain, for in neither medicine nor surgery does he know any affection more easy of diagnosis in the immense majority of cases. He thinks that in some of the cases of vaccinal syphilis that have been published the diagnosis has been sufficiently exact to compel the admission of the possibility of its existence. In none of these cases, however, has he as yet ever been able to discover the original *vaccino-syphilifer.—Ibid.*

Displacement of the Heart in Pneumothorax. *Mr. Editor*,—The following cases, to which I referred at the meeting of the Society for Medical Improvement, Sept. 27th, occurred at the Brompton Hospital for Consumption, and are reported by Dr. Douglas Powell. In the *Medical Times and Gazette* for January 30th, 1869, Dr. Powell called attention to the displacement of the heart in cases of pneumothorax, and showed that at first this change in position was due to the traction exercised by the healthy lung and not caused by pressure in the diseased pleura. The mediastinum is in reality poised by the contending elasticity of the two lungs; and so, when one lung is collapsed the other pulls the heart over to its own side. Dr. Powell has sent the following cases in support of his views. W. C. B. Fifield.

Harrison Square, Sept. 28, 1869.

Case I.—Walter C., aged 21, admitted into Brompton Hospital, under care of Dr. Cotton, February 12th, 1869. Patient had a strong hereditary predisposition to phthisis, and suffered from an attack of pleurisy five years ago, but dated his present illness from a cold thirteen months before admission. Previous to his admission he had been staying at the Chelsea Home, and while there, on Jan. 10th, was seized with pain in the left side. He was seen on Jan. 12th by Mr. Charles Joubert, Resident Clinical Assistant at Brompton, who found the whole left side of the chest tympanitic on percussion, with distinct amphoric respiration most plainly audible below the clavicle. The hyper-resonance did not extend below the mid-axillary line vertically; there was dulness posteriorly, with scattered humid crepitation. The *heart's impulse* was seen and felt at the fifth right intercostal space within the nipple; the patient had remarked, at the time of his seizure, that the heart beat to the right of the sternum. Decubitus right; respiration 30 in the minute; pulse 100. There were signs of excavation and softening at the right apex.

Jan. 15th.—Better. No urgent symptoms of pneumothorax. On admission into the hospital, Feb. 12th, the hyper-resonance extended beyond the median line in front; the amphoric respiration was well marked in front and laterally to the base, and metallic echo and tinkle were audible. The deficient resonance, with moist sounds, was

still present posteriorly. The disease in the opposite lung had advanced. The heart's maximum impulse was to the right of the sternum. The apex, however, was ascertained by percussion and palpation to be at the ensiform cartilage. The respirations were 30; pulse 96. No urgent dyspnœa. The patient was weaker, and lingered on, gradually sinking from the progress of the general disease, without any material change in the physical signs. Died May 26th, 1869.

Autopsy, thirty hours after death. No difference noticeable in the relative size of the two sides of the chest. A trocar and canula, connected by tubing with a water-pressure guage, was inserted at the left fifth interspace to ascertain the air pressure. This was found to be nothing. A stilette was then thrust in at the fourth right interspace near the sternum, the trocar withdrawn, and the cartilages removed in the usual way, the heart being secured in position by the stilette. The exact position of the heart was as follows. The apex was behind the sternum and slightly to the left of the median line, *i. e.* in the vertical line of the left sterno-clavicular articulation and at the level of the fifth rib. The left border of the heart occupied the median line, with a slight inclination to the left; the right border was touched by a line let fall from the middle of the right clavicle. The left pleura contained a small quantity of purulent fluid; the lung was collapsed backwards, and a large opening, capable of admitting the little finger, was seen near the apex; its tissue below was partially collapsed, and there were patches of gray tubercle and pneumonia scattered about. Air freely bubbled through the rent on blowing into the trachea.

Case II.—Martha B., æt. 19, was admitted into Bromptom Hospital, under the care of Dr. Alison, March 29th, 1869. This patient was hereditarily predisposed to phthisis, and had suffered from cough for six months. On admission, she presented the signs of cavities at both apices, with softening below, the left lung being most diseased. The symptoms of pneumothorax came on insidiously, but on May 8th the signs were distinct on the left side, the amphoric respiration being very well marked. Patient died May 21st.

Post mortem.—There was no difference in the expansion of the two sides. The left was hyper-resonant, the resonance extending over the ordinary position of the heart's dulness and across the median line to the right margin of the sternum. The air-pressure was tested as in the former case, and found to be *nil*. The heart was then transfixed by a stilette thrust in at the fourth right interspace, close to the sternum, and the cartilages removed. The mediastinum was found to be curved, with its convexity to the right, thus, commencing at the episternal notch; its left border arched to the right border of the sternum at the third cartilage, and thence gradually downwards to the left of the ensiform cartilage. The heart's apex was opposite the fifth rib, exactly in the middle line; its right border corresponded with a line drawn vertically downwards from the middle of the right clavicle. Axis more vertical than natural. The left pleura contained about a pint of purulent fluid. There was a large opening in lung-pleura, opposite to the third rib, freely communicating with a cavity. Both lungs were extensively disorganized, the disease being the pneumonic order of phthisis. On the surface of the left pleura there were many scattered yellow patches, where the pleura had nearly given way from rapid softening down of subjacent consolidations.

Remarks.—These cases present many points of interest, but my special reason for publishing them is that they illustrate very clearly the great displacement of the heart which may take place without any direct pressure, as the simple result of the elastic recoil of the unruptured lung acting on the flaccid mediastinum unopposed by that of the opposite lung. This physiological fact places cardiac displacement in the front rank among the signs of pneumothorax, since it necessarily follows immediately upon the entrance of air into one. Though previously satisfied as to the fact by experiments on the dead subject, and on a dog, and also from clinical observation, I was somewhat astonished to find the displacement so considerable in these two cases. These cases show very well this important clinical fact, viz., that displacement of the heart is not necessarily a result of pressure, even when very considerable, and is, therefore, in itself *no sufficient* reason for the performance of paracentesis. The presence of true amphoric respiration, *i. e.* the amphoric quality accompanying both inspiration and expiration, is the sign that the entry and exit of air is free, the opening non-valvular, and hence the absence of pressure. Very interesting results would be obtained if gentlemen who have opportunities of performing paracentesis, either for fluid or air, would connect a pressure-guage with the

trocar, and ascertain the pressure within the pleura before allowing the air or fluid to escape.

From the Prospectus of the Course of Instruction in the Massachusetts College of Pharmacy we learn that the following gentlemen constitute the officers and faculty: *President*, Thomas Hollis; *Vice Presidents*, Charles A. Tufts, Samuel M. Colcord; *Recording Secretary*, Henry W. Lincoln; *Corresponding Secretary*, George F. H. Markoe; *Treasurer*, Ashel Boyden; *Auditor*, Elijah Smalley; *Trustees*, Daniel Henchman, Augustus P. Melzar, Albert G. Wilbor, Edward H. Perry, James S. Melvin, George D. Ricker, Robert R. Kent, Joseph L. Parker; *Faculty*—James F. Babcock, *Professor of General and Analytical Chemistry*; Cyrus M. Tracy, *Professor of Materia Medica and Botany*; George F. H. Markoe, *Professor of Theory and Practice of Pharmacy*. We make a few extracts from the prospectus:—

"The Massachusetts College of Pharmacy was instituted in 1823, and incorporated in 1852. It has always included in its membership the best pharmacists of Boston, and also counts among its members many who reside in other parts of New England.

"The College has at various times since its organization employed lecturers to give lectures on chemistry, but no effort was made to establish a permanent School of Pharmacy until 1867, when a class of thirty-five students was formed to whom instruction was given by three courses of lectures.

"This effort was so successful, and so much interest was awakened, that the Trustees of the College decided to carry on the school, and thus give the young men engaged in learning the business of a druggist and pharmacist an opportunity to become familiar with those branches of science so necessary for the successful practice of the very responsible duties that belong to the pursuit of pharmacy as a business.

"The scheme of instruction for the session of 1869–70 will include the departments of Chemistry, Materia Medica, Botany and Pharmacy. These branches will be as thoroughly and as practically taught as the extent of the course will allow. It is earnestly hoped that the pharmacists and druggists of Boston and New England will support the Trustees and Faculty of the College in this effort to elevate the standard of pharmacial education, and that they will secure the success of the school by sending their young men to this course of instruction. * * * *

"*Qualifications for Graduation.*—Every person upon whom a diploma of this College shall be conferred must be of good moral character, must have arrived at the age of twenty-one years, have attended two courses of each of the lectures delivered in the College, or one course in this College and one course in some other recognized College of Pharmacy; or when no such College exists in his locality, in some other recognized (medical) College where the same branches are taught; and have served an apprenticeship of at least four years with some person or persons qualified to conduct the business of a pharmacist, of which fact he must produce satisfactory evidence to the board of examiners. He must also produce an original dissertation, or thesis, upon some subject of pharmacy, materia medica, chemistry, or one of the branches of science closely connected therewith, which shall be written with neatness and accuracy. The thesis, with the evidence of apprenticeship and diploma fee, shall be deposited with the Professor of Pharmacy, on or before the first of March of the session in which the application shall be made. He must also be recommended in writing by the committee of examination and the professors jointly, and if his application be finally approved of by the board of trustees, he shall receive the diploma of the College.

"The regular examination for the degree shall take place in April. A second examination will be held, when necessary, in the month of June, of which those students who may not have accomplished their terms of service at the regular examination (and other qualified applicants) may avail themselves.

"Only such students as may have served their time in *dispensing stores* will be entitled to the degree of Graduate in Pharmacy. Clerks from wholesale drug stores will receive a certificate of proficiency, and *will not be examined in extemporaneous pharmacy*. Medical students and others who are not looking forward to Pharmacy as their calling, will be admitted to the lectures in either of the departments they may wish. Such persons will be ineligible to the degree, but will in other respects have the same advantages as regular students of Pharmacy. The reason for this distinction is, that the art of dispensing medicines can only be properly learned by long practice at the dispensing counter; lectures, be

they never so good, are only valuable aids to practical instruction, and utterly fail to make a good dispenser in the absence of careful, practical training under the supervision of a competent preceptor."

EXPULSION OF MR. F. STEARNS FROM THE AMERICAN PHARMACEUTICAL ASSOCIATION.—The resolutions offered by Dr. E. R. Squibb yesterday, and on motion laid over till this morning, were now read.

Whereas, it must be an object of this Association, in common with all others of similar character, to oppose what is wrong within the sphere of its action and influence; and whereas, the constitution of the Association asserts that its objects are to elevate the standing, increase the knowledge, oppose the adulteration, and suppress the empiricism of pharmacy; and whereas, a member of this Association has put forth a nostrum called "Sweet Quinine," which contains no quinine, and is, therefore, a fraudulent imposture, therefore

Resolved, That Mr. Frederick Stearns has, in this so-called "Sweet Quinine," and in the advertisements concerning it, violated the sense of moral rectitude of this Association, and has violated its constitution and the general purposes of its organization.

Resolved, That for these offences Mr. Frederick Stearns, of Detroit, be expelled from this Association.

Remarks were made by Messrs. Colcord, Stearns, Procter, Shinn, Balluf, and Tufts, when a substitute for Dr. Squibb's resolution was offered by Wm. Wright, Jr.

"*Resolved*, That in the manufacture and manner of advertising the article known as Sweet Quinine, Mr. Frederick Stearns, of Detroit, has committed a serious offence against the ethics of this Association, and is deserving of its severest censure."

After remarks by several of its members, the ayes and nays were called for, the Delegates first, and members in attendance afterwards. The resolution of Mr. Wright was lost—thirty ayes to sixty-four nays. A motion to lay over the matter for one year was lost—twenty-four ayes to fifty-six nays.

The original resolutions of Dr. Squibb then came up, and were carried by sixty-three ayes to twenty-two nays.

The President, Mr. E. H. Sargent, then said:—It becomes my painful duty to announce that Mr. Frederick Stearns, of Detroit, is, by vote of this Association, expelled from its membership.

Mr. Stearns rose and said that he thought the action of the Association unjust; it had judged him by what he had done, he hoped that they would judge him in future by what he should do. He retired from the Hall.—*Druggist's Circular*.

This act of the American Pharmaceutical Association—the expulsion of an ex-President in vindication of its own integrity, at a cost of untold grief on the part of members by whom Mr. Stearns had been loved and trusted—places the Association in a position to demand our unqualified admiration. It may well put to the blush the inadvertence on the part of our Profession which has allowed the notices of "sweet quinine" in the editorial columns of medical journals of this country and the British Provinces for the last six months or more.

THE NEW HYPNOTIC, CHLORAL.—In a lecture recently delivered by Herr Liebreich before the Berlin Medical Society, the following statements are made.

The form best adapted for administration is the hydrate, $C_2 H Cl_3 O H_2 O$. This substance is white and glistening, has a pungent odor, a bitter taste, and is easily soluble in water. When injected under the cutis, it causes no local irritation. Liebreich has thus employed it in a number of cases in the treatment of insane persons. In the dose of 1·35 grammes, it usually brings on a sleep of five hours' duration. In the case of a patient affected with melancholia and stupor, 3·5 grammes dissolved in a wineglass of water and given by the mouth produced a sleep of sixteen hours. In a case of very painful inflammation of the wrist-joint, about 2.5 were given, followed by hypnosis and anæsthesia to an extent sufficient to allow of bandaging the wrist, which had been impossible before. In all the cases the sleep was natural in character.

Von Langenbeck, in a lecture upon the application of hydrate of chloral to the treatment of delirium potatorum, describes a case of comminuted fracture of the humerus, followed by violent delirium tremens; 0·42 gram. of opium, with brandy, was given during twelve hours without effect. Gangrene appeared threatening, and exarticulation was thought of. Von Langenbeck ordered 4 gram. of hydrate of chloral, to be swallowed in one dose, and afterwards 2 gram., to be injected three times in quick succession. A sound sleep followed, lasting sixteen hours, from which the patient awoke free from his threatening

symptoms. Von L. thinks he has observed favorable effects in a case of trismus traumaticus.

It was stated, at the same time, by von Bardeleben, that he had likewise observed excellent effects in many cases from internal doses of 2–5 grammes. A good formula is the following :—

℞. "Hydrate of chloral," 2 grammes ;
Aquæ destillatæ,
Syrupi simplicis, āā 15 "
M. S. For one dose.

—*Allg. Med. Centr. Ztg.*, Nos. 64 & 65.

D. F. L.

Chloral.—Dr. Liebreich's recent paper at the Paris Academy of Sciences on the action of *chloral* says it is a trichloride of aldehyde, and is soluble in water, and as in this solution it exercises no irritant effect, it is very suitable for absorption into the economy. It takes its place between ether and chloroform as an anæsthetic.

Experiments made on rabbits have given the most satisfactory results. Profound and calm sleep has been maintained for eight or ten hours, and Dr. Liebreich adds that the rabbits on awakening have manifested none of the usual results, and have proceeded to eat with avidity.—*Dublin Med. Press & Circular.*

In an article in the London *Med. Times and Gazette* on hydrate of chloral and its use in practice, by T. Spencer Wells, F.R.C.S., we find the following statements :

"Chloral readily dissolves in water, and the solution is easily absorbed. The alkaline liquids of the body would therefore set chloroform free in the tissues. The other component, the formic acid, from its comparatively small proportion, can have but very slight effect.

"A minute dose of chloral was sufficient to produce the symptoms of narcosis from chloroform in a young rabbit; the animal fell gradually asleep, but without the stage of excitement. Regular pulse and respiration were the only evidences of life."

Deaths from Chloroform.—Dr. A. T. Hudson, late surgeon United States Army, records (*Pacific Medical and Surgical Journal*, July, 1869) the following case which occurred in the summer of 1863, in front of Atlanta, Ga. The patient was a robust soldier, belonging to the 76th Ohio Infantry, aged about 30. He was to undergo an amputation of a portion of one hand. Chloroform was given in the usual way. He had not taken more than six inspirations before the breathing became difficult and stertorous, the pulse ceased, and in a few moments he was dead. Artificial respiration and all other means tried were of no avail. A *post mortem* the next day revealed nothing. Death was thought to be owing to paralysis of the heart.

In the same journal another case is recorded, which occurred in private practice in the summer of 1855. A strong, robust man, aged about 40 years, who indulged in occasional fits of intemperance, fell and dislocated the head of the humerus. Three days after—the patient meanwhile becoming quite sober—the physician in attendance sent for Dr. E. Bently, United States Army, to reduce the dislocation, and, while the latter was making proper preparation, chloroform (amount not known) was poured upon a sponge and held to the nostrils. After a very few inhalations, unconsciousness ensued, and, with the heel in the axilla, the head of the humerus was replaced with an audible snap. Immediately thereafter the face became livid, and death took place from asphyxia. For more than an hour, though deserted by the alarmed attendants, and even by the other doctor, Dr. Bently employed all means to resuscitate, at his disposal, but in vain. He learned that the man was reported by his physician to have died of apoplexy.—*N. Y. Medical Journal.*

A death from chloroform is reported from the Hanley Infirmary. The newspapers report that there was fatty degeneration and enlargement of the heart, and that "matter" was present on the surface of the brain.—*Lond. Med. Times & Gazette.*

Velocity of Cerebral Functions.—From a paper in the *Archives des Sciences* for April 15th, by Dr. Adolph Hirsch, on M. F. C. Donders's experiments to determine "the velocity of the psychical functions of the brain," as detailed in the *Archives de Reichert et du Bois-Raymond*, the *Journal of Psychological Medicine* extracts the following passages :—

We know now that the brain requires about fifty-thousandths of a second to distinguish and signalize the distinction between two colors, and only fifty-thousandths of a second to distinguish between two vowels which are pronounced. What is more, M. Donders has succeeded in sepa-

rating these two psychical acts into their components, and he has found that the brain employs about $\frac{1}{25}$ of a second to recognize an impression, and $\frac{1}{28}$ of a second for an act of volition to signalize that the impression has been received. * * * *

M. Hirsch thus describes M. Donders's apparatus :—" The noematachograph is composed of a cylinder somewhat like that of the pantograph, on which time is registered by means of a diapason making 261 vibrations in a second, and moved by electro-magnetism, on the principle proposed by Helmholtz. These vibrations can be divided into fifths, and thus thousandths of a second obtained. The time at which the action which produces a sensation occurs is registered by the machine, and likewise that of the sensation experienced by the power experimented upon.

"The mode of accomplishing this varies according to the means of excitation employed. When an inductive current is used to give a slight shock or prick to any portion of the body, or to light up suddenly different letters, or when the spark is observed through colored glasses to produce the sensation of different colors, the current itself makes its own registry by a spark passing between the style of the diapason and the cylinder, through a sheet of blackened paper, in which it makes a little hole. The observer registers his perception by touching a key, which causes a style to mark the cylinder. To avoid the error introduced by the variable time taken by electro-magnets in attracting their armature, M. Donders prefers a purely mechanical signal. The person under observation turns aside a horizontal bar of wood carrying a point, which marks the cylinder. By holding this indicator between two fingers, and turning it right or left, two signals can be given to express different sensations."

Experiments on hearing are then taken up. Will any one tell us how allowance is made in these experiments for the time occupied by muscular action in signalling?

Importance of Rounding the Edge of the Tibia in Amputations through that Bone.—Mr. Porter exhibited to his class at the Meath Hospital, Dublin, a man aged 34 years, whose leg had been amputated by him eighteen days previously, for extensive disease of the os calcis, attended by ulceration of the neighboring soft parts. He called their attention to the operation which he had performed—that at "the place of election"—and to the good stump which resulted. He had used no dressing, save cold water, and during the last few days a little chlorinated solution, and the lines of incision were now almost entirely healed, and certainly were as nearly well as if carbolic acid, or any other application, had been employed. But the particular point to which he asked their attention, was the importance of carefully rounding off the anterior edge of the tibia in this and other amputations through that bone. There was a great tendency for the anterior flap, which in this operation is composed of skin, to ulcerate over the end of the tibia, and in order to avoid that consequence, he had found great benefit in not merely sloping the saw in the beginning of the operation, removing it, and re-entering it at right angles to the long axis of the bone, or in cutting straight across at first, and then sloping off the prominent anterior edge, as generally recommended; but in making only one cut, using Butcher's saw, and sloping it during the entire of the division of the bone, so as to round off the end in a gentle curve from its anterior to its posterior edge. He made this a constant practice, and he had never found the bone to cause any disagreeable after-effects in a stump thus formed.—*Dublin Medical Press and Circular.*

In Paris, the other day, a girl was observed on the street with a wooden leg under her arm, while a gentleman was calling to her from a window on the opposite side of the street, gesticulating fiercely and demanding her return. To the large crowd which the scene attracted, the girl made explanation that she was washerwoman to the gentleman, that he would not pay her, that she visited his lodgings to demand her money, and that on his refusal she had taken possession of his wooden leg, purposing not to return it until she had received her money.—*Physician and Pharmaceutist.*

Extraordinary Operation.—Dr. Bœhm, a celebrated German surgeon, has recently performed the operation of separating two female children, five years of age, who were joined together in the same manner as the Siamese twins. The German papers state that the operation was attended with perfect success; but *one* of the patients seems to have died the same day. The survivor is in good health.—*New York Medical Record.*

Medical Miscellany.

THE PHYSICIANS' VISITING LIST FOR 1870.—We present our thanks to Messrs. Lindsay & Blakiston for a copy of "The Physician's Visiting List for 1870"—to us an adjunct of the New Year as indispensable as New Year's day itself. If there are any who need to be told, they may here read that its contents are, as follows, viz. :—

Almanac; Table of Signs; Marshall Hall's ready Method in Asphyxia; Poisons, and their Antidotes; Table for calculating the Period of Uterogestation; Blank Leaves, for Visiting List, Monthly Memoranda, Addresses of Patients and others, Addresses of Nurses, their references, &c., Accounts asked for, Memoranda of Wants, Obstetric Engagements, Vaccination Engagements, Record of Births, Record of Deaths, General Memoranda, &c.

DEATHS IN THE CITY OF PROVIDENCE, SEPT., 1869.—There were 104 deaths in the city of Providence during the month of September, or 30 *less* than in the preceding month, and 18 *less* than in September, 1868. Though the whole number of deaths was 30 less in September than in August, the number from summer complaints was nearly the same. This might be expected from the weather in the two months, the atmosphere being, apparently, as favorable for decomposition of filth, and the production of foul air in September as in August. The average for the six years, previous to 1869, for the months of July, August and September, was 108, or 10 more than in the present year; and this, notwithstanding the large increase in the population of the city, by annexation and otherwise. Of the 32 decedents from summer complaints, 10 were of American, and 22 of foreign parentage. Of the 53 decedents under 5 years of age, 15 were of American, and 38 of foreign parentage. Of the 10 decedents from scarlatina, 1 was of American, and 9 of foreign parentage.

MASSACHUSETTS GENERAL HOSPITAL.—Drs. J. C. Warren and R. Willard have been appointed Physicians to out-patients at the Massachusetts General Hospital—in addition to the present staff.

THE CHILDREN'S HOSPITAL.—Dr. B. E. Cotting and Dr. John Homans have been elected members of the Medical Staff of The Children's Hospital by the Board of Managers of that Institution.

PROF. LUDWIG BOEHM, whose fatal illness we reported a short time since, deceased on the first day of August. Among other things Prof. Boehm was distinguished for the best description extant of the intestinal glands; and his teachings upon the anatomical changes in cholera are classic to this day. He also published important works on Strabismus, on the accommodation of the eye and on other ophthalmological subjects.

BOOK TRADE CHANGES.—No one who has been familiar with the pleasant atmosphere of the old store with the round numbers, for many years past, can doubt that Mr. Alexander Williams will carry with him into the "Old Corner," 135 Washington Street, Boston, the administrative ability and peculiar tact required to make a popular and successful Bookstore, and to fully sustain the reputation the place has gained in past days. Messrs. A. Williams & Co. will do at their new place a general book business, leaving the periodicals behind at the old stand, and will also retain the agency for the publications of Harper & Brothers, and the important specialties of agricultural and mechanical books.—*Boston Daily Advertiser.*

A MORPHINE EATER.—A laborer residing in Brunswick, Maine, has paid out during the last fourteen years about $1,300 for morphia, for the use of his wife. This expensive helpmate for a working man once walked twenty-four miles to get her usual supply.—*Physician and Pharmaceutist.*

MEDICAL DIARY OF THE WEEK.

MONDAY, 9, A.M., Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.
TUESDAY, 9, A.M., City Hospital, Medical Clinic, 10, A.M., Surgical Lecture. 9 to 11, A.M., Boston Dispensary. 9–11, A.M., Massachusetts Eye and Ear Infirmary.
WEDNESDAY, 10, A.M., Massachusetts General Hospital, Surgical Visit. 11 A.M., OPERATIONS.
THURSDAY, 9 A.M., Massachusetts General Hospital, Medical Clinic. 10, A.M., Surgical Lecture.
FRIDAY, 9, A.M., City Hospital, Ophthalmic Clinic; 10, A.M., Surgical Visit; 11, A.M., OPERATIONS. 9 to 11, A.M., Boston Dispensary.
SATURDAY, 10, A.M., Massachusetts General Hospital Surgical Visit; 11, A.M., OPERATIONS.

TO CORRESPONDENTS.—Communications accepted :—Cases of Inflammation of the Cœcum, &c. &c. —Case of Strangulated Inguinal Hernia.

PAMPHLETS RECEIVED.—The Probe: An Inquiry into the Use of Stimulants and Narcotics, the Social Evils resulting therefrom, and Methods of Reform and Cure. By Joseph Parrish, M.D. Issued quarterly, from the Sanitarium, Media, Pennsylvania. Pp. 32.—Last Illness of Dr. Alden March, of Albany. By Drs. M'Naughton, Boyd and Armsby. Pp. 11.—Transactions of the New Hampshire Medical Society (Seventy-ninth Anniversary), held at Concord, June 15 and 16, 1869. Pp. 94.—Electricity as a Means of Diagnosis. With a tabulated statement of 500 Cases of Disease, treated mainly by the method of General Electrization. By A. D. Rockwell, A.M., M.D., Fellow of the New York Academy of Medicine, &c. Pp. 20.—Address of Alex. Dunlap, A.M., M.D., of Springfield, Ohio, at the Twenty-fourth Annual Meeting of the Ohio State Medical Society, held at Columbus, June, 1869. Pp. 13.—An Address commemorative of Reuben Dimond Mussey, M.D., LL.D., and Introductory to the Annual Session of the Dartmouth Medical College. By A. B. Crosby, A.M., M.D. Pp. 23.

DEATHS IN BOSTON for the week ending October 9, 109. Males, 47—Females, 62.—Accident, 1—imperforate anus, 1—apoplexy, 1—congestion of the brain, 1—disease of the brain, 3—bronchitis, 1—canker, 2—cholera infantum, 13—consumption, 16—convulsions, 1—cyanosis, 1—debility, 1—diarrhœa, 8—diphtheria, 2—dropsy, 2—dropsy of the brain, 2—drowned, 1—dysentery, 2—scarlet fever, 1—typhoid fever, 5—hæmorrhage, 1—disease of the heart, 3—infantile disease, 4—disease of the kidneys, 2—disease of the liver, 2—inflammation of the lungs, 5—marasmus, 10—old age, 4—premature birth, 1—puerperal disease, 1—scalded, 1—scrofula, 1—suicide, 1—tumor, 1—unknown, 7.

Under 5 years of age, 50—between 5 and 20 years, 7—between 20 and 40 years, 20—between 40 and 60 years, 20—above 60 years, 12. Born in the United States, 79—Ireland, 25—other places, 5.